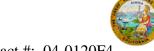
#### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

### WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-020832 Address: 333 Burma Road **Date Inspected:** 21-Feb-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes No Li Yang and Zhu Zhong Hai **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: OBG** Trial Assembly

### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

Segment 12CE (Bottom Panel to Longitudinal Diaphragm hold back weld)

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as Seg3003T-035. The welder identification was 047353 and observed welding in the 1G (Flat) position using approved Welding Procedure Specification WPS-B-T-2231-ESAB. The piece mark was identified as the weld connecting the Bottom Panel to Longitudinal Diaphragm at hold back area; work point E3.

Please reference the pictures attached for more comprehensive details.

Segment 12BW to Segment 12CW (Longitudinal Diaphragm Alignment Fit-up)

This QA Inspector observed the ZPMC personnel performing the fit-up for full height Longitudinal Diaphragm to full height Longitudinal Diaphragm at work point W3 locations. In-process welding by Shielded Metal Arc

## WELDING INSPECTION REPORT

(Continued Page 2 of 4)

Welding (SMAW) was in progress for welding the Temporary attachments. The welder identification was 057333.

Segment 12AW (Deck Panel to Longitudinal Diaphragm hold back weld)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as DP3043-001-334. The welder identification was 046709 and observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G(4F)-FCM-Repair-1. The piece mark was identified as the weld connecting the Deck Panel to the full height Longitudinal Diaphragm at work point W4. ZPMC performed repair welding in accordance with Welding Repair Report B-WR20150.

Please reference the pictures attached for more comprehensive details.

Segment 12BW to Segment 12CW (Deck Panel Transverse Splice weld)

This QA Inspector observed the in process welding operation by the Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The weld joint was designated as OBW12A-001. The welder identification was 041713 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1. The piece mark was identified as the Deck Panel Transverse Splice weld.

Segment 12BW to Segment 12CW (Deck Panel Corner Assembly Transverse Splice weld)

This QA Inspector observed the in process welding operation by the Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The weld joint was designated as OBW12A-002. The welder identification was 041713 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1. The piece mark was identified as the Deck Panel Corner Assembly.

Segment 12BE to Segment 12CE (Deck Panel, Transverse Splice weld)

This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as OBE12A-003. The welder identification was 040320 and observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G(4F)-FCM-Repair-1. The piece mark was identified as the weld connecting the Deck Panel at transverse splice. ZPMC performed repair welding in accordance with Welding Repair Report B-WR20192.

Segment 12BE to Segment 12CE (Deck Panel Corner Assembly, Transverse Splice weld)

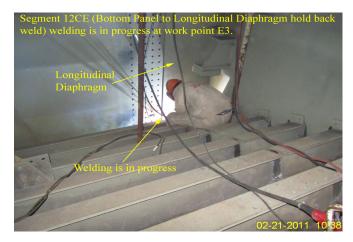
This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as OBE12A-002. The welder identification was 040320 and observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G(4F)-FCM-Repair-1. The piece mark was identified as the weld connecting the Deck Panel Corner Assembly at transverse splice. ZPMC performed repair welding in accordance with Welding Repair Report

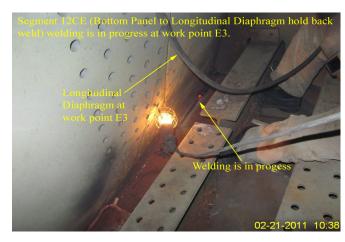
# WELDING INSPECTION REPORT

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### B-WR20192.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.













## **Summary of Conversations:**

No relevant conversations were reported on this date.

#### **Comments**

# WELDING INSPECTION REPORT

(Continued Page 4 of 4)

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Math, Manjunath	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer